(formerly Exxon Research and Engineering Company)

Annandale, New Jersey 08801-0900

P. O. Box 900

#### DECLARATION FOR PATENT APPLICATION

As below named inventor(s) ANDREW D. SULLIVAN GEORGE P. CHARLES CHRISTOPHER F. SULLIVAN KENNETH C. KERN MICHAEL A. HAYES DANIEL H. MASON HOWARD H. SHIEL JOHN M. RIGHI We/I hereby declare that residence, post office address and citizenship are as stated on page 2. We/I believe we/I are the original, first and joint inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention entitled PROCESS UNIT MONITORING TOOLSET, the specification of which X is attached hereto. (check one) \_\_\_\_\_ as Application Serial No. was filed on and was amended on (if applicable). We/I hereby state that we/I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above. We/I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a). We/I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate(s) listed below and have also identified below any foreign application(s) for patent or inventor's certificate(s) having a filing date before that of the application on which priority is claimed: **Priority Claimed** Prior Foreign Application(s) (Country) (Day/Month/Year Filed) Nο (Number) We/I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, we/l acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application: (Filing Date) (Status) (patented, pending, abandoned) (Application Serial No.) We/I hereby claim the benefit under 35 U.S.C. § 119(e) of any United States provisional application(s) listed below: (Filing Date) (Application Serial No.) POWER OF ATTORNEY: As named inventor(s), we/I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. REGISTRATION NUMBERS **NAMES** Ronald D. Hantman 27,796 29,203 Paul E. Purwin **DIRECT TELEPHONE CALLS TO:** SEND CORRESPONDENCE TO: EXXONMOBIL RESEARCH AND ENGINEERING COMPANY (Name and Telephone Number)

**RONALD D. HANTMAN** 

(908) 730-3645

information a statements a	declare that all statements made here and belief are believed to be true; and fund the like so made are punishable by and that such willful false statements may	urther that these statements were fine or imprisonment, or both, up	e made with the knowled nder Section 1001 of Ti	ige that willful false tle 18 of the United	
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME		
01 11112111011	KERN	KENNETH		_C.	
	By Steven Kern, Executor for the es	tate of Kenneth Kern, decease	ed		
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	ENSHIP	
	St. Leonard	Maryland		U.S.A.	
POST ÖFFICE ADDRESS	POST OFFICE ADDRESS	St. Leonard	STATE OR COUNTRY  Maryland	ZIP CODE 20685	
In	yentor's Signature	Ot. Econdra	Date 25 JAN		
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME		
OF INVENTOR	CHARLES	GEORGE		P	
	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	ENSHIP	
E	Glen Mills	Pennsylvania		S.A.	
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE	
	14 Annesley Drive	Glen Mills	Pennsylvania	19342	
	ventor's Signature		Date		
FULL NAME OF INVENTOR	LAST NAME SULLIVAN	FIRST NAME  CHRISTOPHER	MIDDLE NAME	F.	
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE		
CITIZENSHIP	Alexandria	Virginia		J.S.A.	
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE	
ADDRESS	6230 Split Creek Lane	Alexandria	Virginia	22312-3979	
In	ventor's Signature		Date		
FULL NAME OF INVENTOR	LAST NAME SULLIVAN	FIRST NAME  ANDREW	MIDDLE NAME	D.	
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE		
CITIZENSHIP	Billings	Montana	l	J.S.A.	
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE	
ADDICESS	2110 St. Johns Avenue	Billings	Montana	59102	
In	ventor's Signature		Date		
FULL NAME OF INVENTOR	LAST NAME SHIEL	FIRST NAME HOWARD	MIDDLE NAME	Н.	
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP	
	Oakton	Virginia		J.S.A.	
POST OFFICE ADDRESS	POST OFFICE ADDRESS  10248 Appalachian Circle #E2	CITY Oakton	STATE OR COUNTRY  Virginia	ZIP CODE 22124	
	10240 Appaiachtan Circle #EZ	J Canton	ı virgirilə	1 66164	

Inventor's Signature

e Docket No. RDH0005

se Docket No.	RDH0005

FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME
OF INVENTOR	RIGHI	JOHN	M.
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
CITIZENSHIP	London, SW19 4NY	United Kingdom	U.S.A.
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY ZIP CODE
ADDRESS	16 Spencer Hill, Wimbledon	London, SW19 4NY	United Kingdom
In	ventor's Signature		Date
		1	LUDOLENAME
FULL NAME OF INVENTOR	LASTNAME	FIRST NAME	MIDDLE NAME
	HAYES	MICHAEL	A. COUNTRY OF CITIZENSHIP
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	
:	Warrenton	Virginia	U.S.A.
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY ZIP CODE
, DDI (133	6221 Mint Springs Drive	Warrenton	Virginia 20187
ln i	ventor's Signature		Date
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME
OF INVENTOR	MASON	DANIEL	н.
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
CITIZENSHIP	Falls Church	Virginia	U.S.A.
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY ZIP CODE
ADDRESS	310 Bishops Court	Falls Church	Virginia 22046
		1	
	ventor's Signature		Date
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME
OF INVENTOR			
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
CITIZENSHIP			
	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY ZIP CODE
ADDRESS			
In	ventor's Signature		Date
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP
CITIZENSHIP			
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY ZIP CODE
	<u> </u>	1	
In	ventor's Signature		Date





As below named inventor(s)

KENNETH C. KERN

GEORGE P. CHARLES

CHRISTOPHER F. SULLIVAN

ANDREW D. SULLIVAN

HOWARD H. SHIEL

JOHN M. RIGHI

MICHAEL A. HAYES

DANIEL H. MASON

	We/I hereby declare that resi	dence, post office address and o	itizenship are as stated on page	2.
		iginal, first and joint inventor(s) tion entitled <u>PROCESS UNIT M</u>		
	(check one) X	is attached hereto.		
		was filed on	as Application Seria	ıl No.
		and was amended on	(if applicab	e).
		ave reviewed and understand th ny amendment referred to above		ed specification, including
		to disclose information which de of Federal Regulations, §1.56		on of this application in
	patent or inventor's certificat	iority benefits under Title 35, Ure(s) listed below and have also g a filing date before that of the a	identified below any foreign ap	oplication(s) for patent or
ž	Prior Foreign Application(s)			Priority Claimed
Ţ				
	(Number)	(Country)	(Day/Month/Year Filed)	Yes No
then the full	below and, insofar as the su States application in the macknowledge the duty to disc	fit under Title 35, United States bject matter of each of the clair anner provided by the first pa close material information as de filing date of the prior applicatio	ns of this application is not disc aragraph of Title 35, United S fined in Title 37, Code of Fede	closed in the prior United States Code, §112, we/l ral Regulations, §1.56(a)
	(Application Serial No.)	(Filing D	Oate) (Status) (pate	ented, pending, abandoned)
	We/I hereby claim the benefit	under 35 U.S.C. § 119(e) of any	y United States provisional appli	cation(s) listed below:
	(App	lication Serial No.)	(Filing Date)	
	POWER OF ATTORNEY: A prosecute this application and	As named inventor(s), we/l here d transact all business in the Pat	by appoint the following attorne ent and Trademark Office conne	y(s) and/or agent(s) to ected therewith.
	NAI	MES	REGISTRATION N	UMBERS
		D. Hantman E. Purwin	27,796 29,203	
	SEND CORRESPONDENCE T EXXONMOBIL RESEARC	O: H AND ENGINEERING COMPANY		HONE CALLS TO: hone Number)

(formerly Exxon Research and Engineering Company) P. O. Box 900 Annandale, New Jersey 08801-0900

**RONALD D. HANTMAN** 

(908) 730-3645

in st	nformation a tatements a	declare that all statements made here and belief are believed to be true; and fu and the like so made are punishable by and that such willful false statements may	rther that these statements were fine or imprisonment, or both, u	e made with the knowled inder Section 1001 of Ti	lge that willful false tle 18 of the United	
	ULL NAME F INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME		
Ľ		KERN	KENNETH		C	
		By Steven Kern, Executor for the es				
	ESIDENCE & ITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE		
	OST OFFICE	St. Leonard	Maryland CITY	STATE OR COUNTRY	.S.A. ZIP CODE	
	DDRESS	941 Morello Way	St. Leonard	Maryland	20685	
<b>L</b>	Inventor's Signature Date					
	ULL NAME F INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME		
L		CHARLES	GEORGE		P.	
- C	ESIDENCE & ITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE		
PA	OST OFFICE	Glen Mills POST OFFICE ADDRESS	Pennsylvania	STATE OR COUNTRY	S.A. ZIP CODE	
A	DDRESS	14 Annesley Drive	Glen Mills	Pennsylvania	19342	
	In	ventor's Signature <u>Levrye</u> P. (	Charles	Date Jan. 23,	2002	
#   5	ULL NAME F INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	•	
	ESIDENCE 9	SULLIVAN	CHRISTOPHER STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	F.	
	RESIDENCE & CITY CITIZENSHIP Alexandria STATE OR FOR		Virginia	U.S.A.		
TO P	OST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE	
ā[^	DDRESS	6230 Split Creek Lane	Alexandria	Virginia	22312-3979	
	In	ventor's Signature		Date		
	ULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	_	
Ļ	ESIDENCE &	SULLIVAN	ANDREW STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	D.	
	ITIZENSHIP	Billings	Montana		J.S.A.	
	OST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE	
L	DDRESS	2110 St. Johns Avenue	Billings	Montana	59102	
	In	ventor's Signature		Date		
	ULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME		
	F INVENTOR	SHIEL	HOWARD		Н.	
	ESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE		
 	OST OFFICE	Oakton POST OFFICE ADDRESS	Virginia	STATE OR COUNTRY	J.S.A. Tzip code	
	DDRESS	10248 Appalachian Circle #E2	Oakton	Virginia	22124	

Inventor's Signature

Date \_\_\_\_\_

e Docket No. RDH0005

			e Docket No.	RDH0005
information statements	by declare that all statements made he and belief are believed to be true; and t and the like so made are punishable by the and that such willful false statements ma	further that these statements were y fine or imprisonment, or both, u	e made with the knowled under Section 1001 of Tit	dge that willful false the 18 of the United
FULL NAME OF INVENTOR	R RIGHI	FIRST NAME JOHN	MIDDLE NAME	M.
RESIDENCE & CITIZENSHIP	London, SW19 4NY	STATE OR FOREIGN COUNTRY  United Kingdom		ENSHIP J.S.A.
POST OFFICE ADDRESS		London, SW19 4NY	STATE OR COUNTRY United Kingdom	ZIP CODE
	Inventor's Signature		Date	
FULL NAME OF INVENTOR	R HAYES	FIRST NAME MICHAEL	MIDDLE NAME	<del></del> А.
RESIDENCE & CITIZENSHIP	& CITY	STATE OR FOREIGN COUNTRY  Virginia	COUNTRY OF CITIZE	ENSHIP S.A.
POST OFFICE ADDRESS		CITY Warrenton	STATE OR COUNTRY  Virginia	ZIP CODE 20187
lour Burn (hou de	Inventor's Signature		Date	
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
	MASON	DANIEL		Н.
RESIDENCE & CITIZENSHIP	Falls Church	STATE OR FOREIGN COUNTRY  Virginia		J.S.A.
POST OFFICE ADDRESS	POST OFFICE ADDRESS 310 Bishops Court	Falls Church	STATE OR COUNTRY  Virginia	ZIP CODE 22046
rul L	Inventor's Signature		Date	
FULL NAME OF INVENTOR	R LAST NAME	FIRST NAME	MIDDLE NAME	
RESIDENCE &	& CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	ENSHIP

POST OFFICE POS	ST OFFICE ADDRESS	CITY STA	TE OR COUNTRY ZIP CODE
Invent	tor's Signature		Date
FULL NAME LAS	ST NAME	FIRST NAME	MIDDLE NAME

OF INVENTOR	LAST NAME	FIRST NAME		MIDDLE NAME	
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY		COUNTRY OF CITIZE	NSHIP
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE	E OR COUNTRY	ZIP CODE

	Data	
Inventor's Signature	Date	





As below named inventor(s)

KENNETH C. KERN
HOWARD H. SHIEL
We/I hereby declare

**GEORGE P. CHARLES** 

CHRISTOPHER F. SULLIVAN

ANDREW D. SULLIVAN

JOHN M. RIGHI

MICHAEL A. HAYES

DANIEL H. MASON

We/I hereby declare that res	idence, post office addres	s and citizenship ar	e as stated on page	2.	
We/I believe we/I are the or patent is sought on the inver					
(check one) X	is attached hereto.				
	was filed on		as Application Serial	No	
	and was amended on		(if applicable	<del>e</del> ).	
We/I hereby state that we/I he the claims, as amended by a			of the above identified	d specification, i	including
We/I acknowledge the duty accordance with Title 37, Co			I to the examination	n of this applic	cation in
We/I hereby claim foreign p patent or inventor's certifica inventor's certificate(s) havin	te(s) listed below and hav	e also identified b	elow any foreign app	plication(s) for p	
Prior Foreign Application(s)				Priority Cla	<u>imed</u>
(Number)	(Country)	(Day/Mo	onth/Year Filed)	Yes	No
We/I hereby claim the bene- below and, insofar as the su States application in the n acknowledge the duty to dis which occurred between the application:	ubject matter of each of the nanner provided by the sclose material information	ne claims of this ap first paragraph of n as defined in Title	oplication is not discl Title 35, United St e 37, Code of Federa	osed in the pricates Code, §1 al Regulations,	or United 12, we/l §1.56(a)
(Application Serial No.)	· · · · · · · · · · · · · · · · · · ·	(Filing Date)	(Status) (pater	nted, pending, aban	doned)
We/I hereby claim the benefi	it under 35 U.S.C. § 119(e	) of any United Sta	tes provisional applic	ation(s) listed b	elow:
(App	plication Serial No.)	*****	(Filing Date)		
POWER OF ATTORNEY: A prosecute this application an					nt(s) to
NA	MES		REGISTRATION NU	JMBERS	
	D. Hantman E. Purwin		27,796 29,203		
SEND CORRESPONDENCE	TO:		DIRECT TELEPHO	ONE CALLS TO:	

EXXONMOBIL RESEARCH AND ENGINEERING COMPANY (formerly Exxon Research and Engineering Company) P. O. Box 900 Annandale, New Jersey 08801-0900

(Name and Telephone Number) **RONALD D. HANTMAN** 

(908) 730-3645

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information a statements a	declare that all statements made he and belief are believed to be true; and and the like so made are punishable b and that such willful false statements m	further that these statements were	e made with the knowled under Section 1001 of Ti	dge that willful fals tle 18 of the Unite
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
OF INVENTOR	KERN	KENNETH		C.
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	
CITIZENSHIP	Burke	Virginia		J.S.A.
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	1906 Tinsmith Lane	Burke	Virginia	22015
	1000 1110111111 20110		1.19	
In	ventor's Signature	<u></u>	Date	
CIUL MANE	LACT NAME	I FIRST NAME	MIDDLE NAME	
FULL NAME OF INVENTOR	LAST NAME			_
DECIDENCE &	CHARLES	GEORGE STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	P.
RESIDENCE & CITIZENSHIP	CITY			
	Glen Mills	Pennsylvania		
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
	14 Annesley Drive	Glen Mills	Pennsylvania	19342
In	ventor's Signature		Date	
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
DECIDENCE &	SULLIVAN	CHRISTOPHER		F.
KESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP
CITIZENSHIP	Alexandria	Virginia	ι	J.S.A.
POSTOFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	6230 Split Creek Lane	Alexandria	Virginia	22312-3979
	ventor's Signature		Date <u>7</u> 心2,の1.(	
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
	SULLIVAN	ANDREW		D.
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP
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POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	2110 St. Johns Avenue	Billings	Montana	59102
-				
In	ventor's Signature		Date	

FULL NAME	LAST NAME	FIRST NAME		MIDDLE NAME	-
OF INVENTOR	SHIEL	HOWARD			н
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENS		NSHIP
CITIZENSHIP	Oakton	Virginia		U	.S.A.
POST OFFICE	POST OFFICE ADDRESS	CITY	STAT	E OR COUNTRY	ZIP CODE
ADDRESS	10248 Appalachian Circle #E2	Oakton		Virginia	22124

Inventor's Signature Dat 1/15/200 Z

<u></u>	<b>-</b>	, , , , , , , , , , , , , , , , , , ,		e Docket No.	RDH0005
	information a statements a	re true and that all sta made with the knowled der Section 1001 of Tit lication or any patent issi	ge that willful false le 18 of the United		
	FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
	OF INVENTOR	RIGHI	JOHN		M.
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	NSHIP
	CITIZENSHIP	London, SW19 4NY	United Kingdom	U.	.S.A.
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
	ADDRESS	16 Spencer Hill, Wimbledon	London, SW19 4NY	United Kingdom	
	In	ventor's Signature		Date	
	FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
	OF INVENTOR	HAYES	MICHAEL	<i> </i>	۸. ا
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	NSHIP
	CITIZENSHIP	Warrenton	Virginia		S.A.
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
		6221 Mint Springs Drive	Warrenton	Virginia	20187
	ln	ventor's Signature Mahoula	Thy (	Date	002
T.		LAST NAME	FIRST NAME	MIDDLE NAME	
2	OF INVENTOR	MASON	DANIEL		н.
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	NSHIP
	CITIZENSHIP	Falls Church	Virginia	U.	.S.A.
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
	ADDRESS	310 Bishops Court	Falls Church	Virginia	22046
	ln	ventor's Signature	5.2	Date Jun 7	1,2002
	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
	RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	NSHIP
	POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE

In	ventor's Signature	Date			
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME		MIDDLE NAME	
RESIDENCE & CITIZENSHIP	СІТУ	STATE OR FOREIGN COUNTRY		COUNTRY OF CITIZ	ENSHIP
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE	OR COUNTRY	ZIP CODE

Inventor's Signature	Date	



	As below named inven	tor(s)					
	KENNETH C. KERN HOWARD H. SHIEL	GEORGE P. C JOHN M. RIGH		CHRISTOPHER F. MICHAEL A. HAYE		ANDREW D. SUL DANIEL H. MASO	
	We/I hereby declare th	at residence, post	office address	and citizenship are a	as stated on pa	age 2.	
	We/l believe we/l are patent is sought on the						
	(check one)	X is attached	hereto.				
		was filed o	n	as	Application Se	erial No.	
		and was ar					
	We/I hereby state that the claims, as amende				he above iden	tified specification,	including
	We/I acknowledge the accordance with Title 3				o the examin	ation of this appli	cation in
S week party forms	We/I hereby claim fore patent or inventor's certificate(s)	rtificate(s) listed b	elow and hav	e also identified belo	w any foreign	application(s) for	ion(s) fo patent o
	Prior Foreign Application	on(s)				Priority Cla	imed
	(Number)		(Country)	(Day/Month	/Year Filed)	Yes	No
	We/I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, we/acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a which occurred between the filing date of the prior application and the national or PCT international filing date of this application:						
	(Application Ser	al No.)		(Filing Date)	(Status) (	patented, pending, abar	ndoned)
	We/I hereby claim the	benefit under 35 U	S.C. § 119(e)	of any United States	provisional ap	oplication(s) listed b	elow:
		(Application Serial N	lo.)	<del> </del>	(Filing Date	e)	
	POWER OF ATTORN prosecute this applicat	EY: As named in on and transact all	ventor(s), we/ business in t	I hereby appoint the ne Patent and Trader	following atto mark Office co	rney(s) and/or age nnected therewith.	nt(s) to
		NAMES		R	EGISTRATION	NUMBERS	
	R	onald D. Hantman			27,7		
l		Paul E. Purwin			29,2	03	
	SEND CORRESPONDE					EPHONE CALLS TO:	
	EXXONMOBIL RES	SEARCH AND ENGI		IPANY	(Name and Te	elephone Number)	
	(formerly Exxon Re	search and Engineer	ing Company)		RONALD D. H	IANTMAN	
	Annandale, New Je	rsey 08801-0900			(908) 730-364	5	

			e Docket No.	RDH0005
information a statements a	declare that all statements made he nd belief are believed to be true; and nd the like so made are punishable be and that such willful false statements m	further that these statements were by fine or imprisonment, or both, u	re made with the knowled under Section 1001 of Ti	dge that willful fa itle 18 of the Uni
FULL NAME OF INVENTOR	LAST NAME	FIRST_NAME	MIDDLE NAME	
0	KERN	KENNETH		C
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP
	Burke	Virginia		J.S.A.
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDITEOU	1906 Tinsmith Lane	Burke	Virginia	22015
In	ventor's Signature		Date	
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
OF INVENTOR			i	<b>D</b>
RESIDENCE &	CHARLES	GEORGE STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	P. · · · · · · · · · · · · · · · · · · ·
CITIZENSHIP				
POST OFFICE	Glen Mills POST OFFICE ADDRESS	Pennsylvania city	STATE OR COUNTRY	.S.A.
ADDRESS				
	14 Annesley Drive	Glen Mills	Pennsylvania	19342
	ventor's Signature			
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
	SULLIVAN	CHRISTOPHER		F.
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP
	Alexandria	Virginia		J.S.A.
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDITEO	6230 Split Creek Lane	Alexandria	Virginia	22312-397
In	ventor's Signature		Date	
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
OF INVENTOR	SULLIVAN	ANDREW		D.
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	
CITIZENSHIP	Billings	Montana		J.S.A.
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	2110 St. Johns Avenue	Billings	Montana	59102
In	ventor's Signature and the	2. Sulli	Date //16/0	۲
			<b>7</b> ·· · · · · · · · · · · · · · · · · ·	
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	

FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
OF INVENTOR	SHIEL	HOWARD		H
	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	NSHIP
CITIZENSHIP	Oakton	Virginia	U	.S.A.
	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	10248 Appalachian Circle #E2	Oakton	Virginia	22124

Inventor's Signature

Date \_\_\_\_

e Docket No.	RDH0005
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FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
OF INVENTOR	RIGHI	JOHN		М.
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP
CITIZENSHIP	London, SW19 4NY	United Kingdom		J.S.A.
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	16 Spencer Hill, Wimbledon	London, SW19 4NY	United Kingdom	
In	ventor's Signature		Date	
••				
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
OF INVENTOR	HAYES	MICHAEL		A.
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP
CITIZENSHIP	Warrenton	Virginia	-   1	.S.A.
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	6221 Mint Springs Drive	Warrenton	Virginia	20187
	OZZT Will Opings Divo	1 Transacti	, viigiilia	20101
	ventor's Signature		Date	
9				
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
	MASON	DANIEL		Н.
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP
	Falls Church	Virginia		J.S.A.
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
	310 Bishops Court	Falls Church	Virginia	22046
Ir	ventor's Signature		Date	
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
Of INVENTOR				
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	ENSHIP
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
Ir	ventor's Signature		Date	
CHILL MANE	LIACTNAME	FIRST NAME	MIDDLE NAME	
FULL NAME OF INVENTOR	LAST NAME	FIRST MAINE	WIDDLE WANE	
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZ	FNSHIP
CITIZENSHIP	6117	J.ALE OKT OKEIGH GOOKING	JOSSIALIKI OL CITIZ	
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	1 COT OF THE ADDRESS			
	1			<u> </u>
	tada Cianatura		Data	
ir	nventor's Signature		Date	





As below named inventor(s) **GEORGE P. CHARLES** CHRISTOPHER F. SULLIVAN ANDREW D. SULLIVAN KENNETH C. KERN JOHN M. RIGHI MICHAEL A. HAYES DANIEL H. MASON HOWARD H. SHIEL

	We/I hereby declare that resi	dence, post office add	ress and citizenship	are as stated on page	2.	
	We/l believe we/l are the or patent is sought on the inven					hich a
	(check one)	is attached hereto.				
		was filed on		as Application Seria	l No	
		and was amended o	n	(if applicabl	e).	
	We/I hereby state that we/I h the claims, as amended by a	ave reviewed and und ny amendment referre	derstand the contents d to above.	of the above identifie	ed specification, inc	ludin
	We/I acknowledge the duty accordance with Title 37, Cod			ial to the examination	on of this applicat	ion ii
	We/I hereby claim foreign pr patent or inventor's certificat inventor's certificate(s) having	e(s) listed below and	have also identified	below any foreign ap	plication(s) for pat	(s) fo ent o
L	Prior Foreign Application(s)				Priority Claime	ed
: Cj						
	(Number)	(Country)	(Day/N	Month/Year Filed)	Yes	No
	We/I hereby claim the bene below and, insofar as the su States application in the m acknowledge the duty to dis which occurred between the application:	bject matter of each anner provided by t close material informa	of the claims of this a he first paragraph of ation as defined in Ti	application is not disc of Title 35, United S tle 37, Code of Fede	closed in the prior listates Code, §112 ral Regulations, §1	United !, we <i>l</i> I.56(a
	(Application Serial No.)		(Filing Date)	(Status) (pate	ented, pending, abandor	ned)
	We/I hereby claim the benefit	t under 35 U.S.C. § 11	9(e) of any United St	ates provisional appli	cation(s) listed belo	w:
	(Арг	lication Serial No.)		(Filing Date)		
	POWER OF ATTORNEY: A prosecute this application and	As named inventor(s), d transact all business	we/I hereby appoint in the Patent and Tr	the following attorne ademark Office conne	y(s) and/or agent(sected therewith.	 s) to
ſ	NAI	MES		REGISTRATION N	UMBERS	
		D. Hantman E. Purwin		27,796 29,203		
ſ	SEND CORRESPONDENCE I	·O·		DIRECT TELEPH	IONE CALLS TO:	

EXXONMOBIL RESEARCH AND ENGINEERING COMPANY (formerly Exxon Research and Engineering Company)
P. O. Box 900 Annandale, New Jersey 08801-0900

(Name and Telephone Number) RONALD D. HANTMAN (908) 730-3645





RDH0005

OF INVENTOR		FIRST NAME	MIDDLE NAME	
	KERN	KENNETH		C.
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	ENSHIP
CITIZENSHIP	Burke	Virginia	U	J.S.A.
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	1906 Tinsmith Lane	Burke	Virginia	22015
In <sup>,</sup>	ventor's Signature		Date	
•••				
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
OF INVENTOR	CHARLES	GEORGE		P.
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	
CITIZENSHIP	Glen Mills	Pennsylvania		S.A.
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
ADDRESS	14 Annesley Drive	Glen Mills	Pennsylvania	19342
	147 tillooloy Bitto		1 Office grade	100.124
In <sup>,</sup>	ventor's Signature		Date	
•••				
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
OF INVENTION	SULLIVAN	CHRISTOPHER		F.
RESIDENCE & CITIZENSHIP	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	ENSHIP
	Alexandria	Virginia		J.S.A.
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE
	6230 Split Creek Lane	Alexandria	Virginia	22312-3979
ln <sup>,</sup>	ventor's Signature		Date	
FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME	
FULL NAME OF INVENTOR	LAST NAME SULLIVAN	ANDREW		D.
FULL NAME OF INVENTOR RESIDENCE &	LAST NAME		COUNTRY OF CITIZE	
FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP	SULLIVAN CITY Billings	ANDREW STATE OR FOREIGN COUNTRY  Montana	COUNTRY OF CITIZE	ENSHIP J.S.A.
FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP POST OFFICE	LAST NAME SULLIVAN CITY	ANDREW STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	ENSHIP
FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP	SULLIVAN CITY Billings	ANDREW STATE OR FOREIGN COUNTRY  Montana	COUNTRY OF CITIZE	ENSHIP J.S.A.
FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP POST OFFICE	SULLIVAN CITY Billings POST OFFICE ADDRESS	ANDREW STATE OR FOREIGN COUNTRY  Montana  CITY	COUNTRY OF CITIZE	ENSHIP  J.S.A.  ZIP CODE
FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP POST OFFICE ADDRESS	SULLIVAN CITY Billings POST OFFICE ADDRESS	ANDREW STATE OR FOREIGN COUNTRY  Montana  CITY	COUNTRY OF CITIZE	ENSHIP  J.S.A.  ZIP CODE
FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP POST OFFICE ADDRESS	SULLIVAN  CITY  Billings  POST OFFICE ADDRESS  2110 St. Johns Avenue  ventor's Signature	ANDREW STATE OR FOREIGN COUNTRY  Montana CITY  Billings	COUNTRY OF CITIZE  U STATE OR COUNTRY  Montana  Date	ENSHIP  J.S.A.  ZIP CODE
FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP POST OFFICE ADDRESS Inv	SULLIVAN  CITY  Billings  POST OFFICE ADDRESS  2110 St. Johns Avenue	ANDREW STATE OR FOREIGN COUNTRY  Montana  CITY	COUNTRY OF CITIZE  L STATE OR COUNTRY  Montana	ENSHIP  J.S.A.  ZIP CODE
FULL NAME OF INVENTOR  RESIDENCE & CITIZENSHIP  POST OFFICE ADDRESS  Inv	SULLIVAN  CITY  Billings  POST OFFICE ADDRESS  2110 St. Johns Avenue  ventor's Signature  LAST NAME  SHIEL	ANDREW STATE OR FOREIGN COUNTRY Montana CITY Billings  FIRST NAME HOWARD	COUNTRY OF CITIZE  STATE OR COUNTRY  Montana  Date  MIDDLE NAME	J.S.A. ZIP CODE 59102 H.
FULL NAME OF INVENTOR  RESIDENCE & CITIZENSHIP  POST OFFICE ADDRESS  Inv  FULL NAME OF INVENTOR  RESIDENCE &	SULLIVAN  CITY  Billings  POST OFFICE ADDRESS  2110 St. Johns Avenue  ventor's Signature  LAST NAME	ANDREW STATE OR FOREIGN COUNTRY Montana CITY Billings	COUNTRY OF CITIZE  STATE OR COUNTRY  Montana  Date  MIDDLE NAME  COUNTRY OF CITIZE	J.S.A. ZIP CODE 59102  H. ENSHIP
FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP POST OFFICE ADDRESS Inv FULL NAME OF INVENTOR RESIDENCE & CITIZENSHIP	SULLIVAN  CITY  Billings  POST OFFICE ADDRESS  2110 St. Johns Avenue  ventor's Signature  LAST NAME  SHIEL  CITY  Oakton	ANDREW STATE OR FOREIGN COUNTRY Montana CITY Billings  FIRST NAME HOWARD STATE OR FOREIGN COUNTRY Virginia	COUNTRY OF CITIZE  STATE OR COUNTRY  Montana  Date  MIDDLE NAME  COUNTRY OF CITIZE	J.S.A. ZIP CODE 59102  H. ENSHIP J.S.A.
FULL NAME OF INVENTOR  RESIDENCE & CITIZENSHIP  POST OFFICE ADDRESS  Inv  FULL NAME OF INVENTOR  RESIDENCE &	SULLIVAN  CITY  Billings  POST OFFICE ADDRESS  2110 St. Johns Avenue  ventor's Signature  LAST NAME  SHIEL	ANDREW STATE OR FOREIGN COUNTRY Montana CITY Billings  FIRST NAME HOWARD STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE  STATE OR COUNTRY  Montana  Date  MIDDLE NAME  COUNTRY OF CITIZE	J.S.A. ZIP CODE 59102  H. ENSHIP





**RDH0005** 

FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME				
OF INVENTOR	RIGHI	JOHN		M.			
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE				
CITIZENSHIP	London, SW19 4NY	United Kingdom	U	.S.A.			
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE			
ADDRESS	16 Spencer Hill, Wimbledon	London, SW19 4NY	United Kingdom				
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In	ventor's Signature		Date 28-Jay-	LOGL			
			T				
FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME				
	HAYYES	MICHAEL		٩			
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	NSHIP			
	Warrenton	Virginia		S.A			
POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE			
ADDRESS	6221 Mint Springs Drive	Warrenton	Virginia	20187			
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Ų In	ventor's Signature		Date				
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FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME				
	MASON	DANIEL		H			
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	NSHIP			
E CITIZENSIII	Falls Church	Virginia		.S.A.			
POST OFFICE ADDRESS	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE			
ADDRESS	310 Bishops Court	Falls Church	Virginia	22046			
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In	ventor's Signature		Date				
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FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME				
OF INVENTOR							
RESIDENCE &	CITY	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZE	NSHIP			
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POST OFFICE	POST OFFICE ADDRESS	CITY	STATE OR COUNTRY	ZIP CODE			
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FULL NAME	LAST NAME	FIRST NAME	MIDDLE NAME				
OF INVENTOR							
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POST OFFICE ADDRESS	POST OFFICE ADDRESS		STATE OR COUNTRY	LIF CODE			
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In	ventor's Signature		Date				